## Functional Requirements

| Req# | Requirement | Comments | Priority | Date Rvwd | SME Reviewed / Approved |
| --- | --- | --- | --- | --- | --- |
| AGILIT\_01 | The robot will start on the blue square. | The location of the robot will dictate where the robot will move. | 1 | 11/19/22 | Aaila Arif |
| AGILIT\_02 | The robot’s LED will turn green and say “Okay, let’s do this!” | Zaccery Tarver (Software Designer) added this. | 3 | 11/19/22 | Aaila Arif |
| AGILIT\_03 | The robot will move forward and stop while avoiding the 1st obstacle. | The robot must avoid the obstacles or else its movement will be affected. | 1 | 11/19/22 | Aaila Arif |
| AGILIT\_04 | The robot will turn, move forward and stop while avoiding the 2nd obstacle. | The robot must avoid the obstacles or else its movement will be affected. | 1 | 11/19/22 | Aaila Arif |
| AGILIT\_05 | The robot will turn, move forward and stop while avoiding the 3rd obstacle. | The robot must avoid the obstacles or else its movement will be affected. | 1 | 11/19/22 | Aaila Arif |
| AGILIT\_06 | The robot will turn and increase its speed to go over the ramp and stop after hitting the end of the ramp. | The ramp can change where the robot lands depending on multiple factors. | 1 | 11/19/22 | Aaila Arif |
| AGILIT\_07 | The robot will adjust itself by moving forward about an inch and turn itself. | This program will ensure the robot will move up to the last blue line. | 2 | 11/19/22 | Aaila Arif |
| AGILIT\_08 | The robot’s LED will turn red and say, “Time to destroy those pins!” | Zaccery Tarver (Software Designer) added this. | 3 | 11/19/22 | Aaila Arif |
| AGILIT\_09 | The robot will increase its speed and move forward fast to knock over as many pins as possible. | Points will be added to each pin that the robot knocks down. | 1 | 11/19/22 | Aaila Arif |
| AGILIT\_10 | The robot’s LED will turn yellow and say, “I did it!” | Zaccery Tarver (Software Designer) added this. | 3 | 11/19/22 | Aaila Arif |
| AGILIT\_11 | The robot’s program will end. | The robot’s location at the end doesn’t matter. | 1 | 11/19/22 | Aaila Arif |